



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/737,191

12/15/2003

Kimmo Mylly

915-007.68

5502

4955

7590

07/27/2006

WARE FRESSOLA VAN DER SLUYS &
ADOLPHSON, LLP
BRADFORD GREEN, BUILDING 5
755 MAIN STREET, P O BOX 224
MONROE, CT 06468

EXAMINER

FRANKLIN, RICHARD B

ART UNIT

PAPER NUMBER

2181

DATE MAILED: 07/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/737,191

Applicant(s)

MYLLY ET AL.

Examiner

Richard Franklin

Art Unit

2181

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 May 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 6-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 6-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 May 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All b) ☐ Some * c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Fritz Fleming
FRITZ FLEMING
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1 – 4 and 6 – 20 have been examined.

Response to Arguments

2. Applicant's arguments with respect to claims 1 – 4 and 6 – 20 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 7 – 10, and 18 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
4. Claim 18 recites the limitation "a module" in line 2 of the claim. There is insufficient antecedent basis for this limitation in the claim. It is not clear if the limitation is referring to the control module or component module of claim 17 or a new module.
5. As per claims 7 – 10, the use of the trademark MultiMediaCard TM as a limitation of the claim to identify or describe a particular product renders the claim indefinite. The claim scope is uncertain since the trademark cannot be used properly to identify any particular material or product. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). See also MPEP § 2173.05(u).

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 1 – 4, 6 – 10, and 16 are rejected under 35 U.S.C. 101 because the claims fail the practical application test. The claims recite data transformation per se with no tangible result.

As per claims 1 – 4, 6 – 10, and 16, the claims recite non-statutory subject matter that is directed solely to data transformation with no claimed tangible result. The result of the claims appear to be a thought (evaluating) or a mere computation within a processor rather than a real world tangible result that is a practical application of the abstract idea of “evaluating.”

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1 – 3, 11, 13 – 14, and 16 – 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 5,424,903 (hereinafter Schreiber) in view of US Patent No. 6,233,625 (hereinafter Vander Kamp).

As per claims 1, 11, 14, Schreiber teaches transmitting information indicative of a time required for an initialization of a respective one of at least two peripheral devices to a host device (Schreiber; Col 3 Lines 61 – 65, Col 6 Lines 15 – 36; The user presses a button indicating a time delay to start each device); combining the information from each of the at least two peripheral devices to produce combined information indicating a time which is required at the most by any of the at least two peripheral devices for its respective initialization (Schreiber; Col 6 Lines 37 – 40; The combined initialization time of the first and second device is used to determine when to turn on the third device); and evaluating the combined information (Schreiber; Col 7 Lines 52 – 58; The microprocessor evaluates the time delays in order to determine when to turn on each device).

Schreiber does not teach wherein the information indicative of a time required for an initialization of a respective one of at least two peripheral devices is transmitted from each of the at least two peripheral devices.

However, Vander Kamp teaches transmitting information indicative of a time required for an initialization of a respective one of at least two peripheral devices from each of the at least two peripheral devices (Vander Kamp; Col 8 Lines 8 – 11).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the teachings of Schreiber to receive the times from the devices because doing so allows for the manufacturer to set the time delay the device needs for initialization (Vander Kamp; Col 6 Lines 40 – 43).

As per claim 2, Schreiber also teaches wherein the information indicating the time required for the initialization of the respective one of the at least two peripheral devices is an information indicative of the time required for the initialization of the respective one of the at least two peripheral devices at a maximum under regular circumstances (Schreiber; Col 6 Lines 21 – 36).

As per claim 3, Vander Kamp also teaches wherein at least one peripheral device transmits the information to the host device upon a predetermined command received from the host device (Vander Kamp; Figure 2 Item 32, Figure 4 Item 52, Col 6 Lines 5 – 19).

As per claim 13, Schreiber teaches a system comprising a host device (Schreiber; Figure 1 Item 10) and at least two peripheral devices (Schreiber; Figure 1 Items 20, 22, 24, and 34), each of the peripherals including a first interface configured to interact with the host device (Schreiber; Figure 1 [Power cords attached to the peripherals]); and the host device including a second interface configured to interact with the at least two peripheral devices (Schreiber; Figure 1 Items 32a – 32f); and a control component configured to receive information indicative of the time required at the respective peripheral device for its respective initialization (Schreiber; Col 3 Lines 61 – 65, Col 6 Lines 15 – 36; The user presses a button indicating a time delay to start each device), configured to combine the information to produce combined information indicating a time which is required at the most by any of the at least two peripheral

devices for its respective initialization (Schreiber; Col 6 Lines 37 – 40; The combined initialization time of the first and second device is used to determine when to turn on the third device), and configured to evaluate the combined information (Schreiber; Col 7 Lines 52 – 58; The microprocessor evaluates the time delays in order to determine when to turn on each device).

Schreiber does not teach a storing component configured to store information indicative of a time required at a respective peripheral device for a respective initialization and a controlling component configured to retrieve information indicative of the time required at the respective peripheral device for the respective initialization from the storing component and configured to transmit the information via the first interface to the host device.

However, Vander Kamp teaches a storing component configured to store information indicative of a time required at a respective peripheral device for a respective initialization (Vander Kamp; Col 5 Line 59 – Col 6 Line 2) and a controlling component configured to retrieve information indicative of the time required at the respective peripheral device for the respective initialization from the storing component (Vander Kamp; Figure 1 Item 28) and configured to transmit the information via the first interface to the host device.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the teachings of Schreiber to receive the times from the devices because doing so allows for the manufacturer to set the time delay the device needs for initialization (Vander Kamp; Col 6 Lines 40 – 43).

As per claim 16, Vander Kamp also teaches wherein the transfer from the peripheral devices to the host device is performed in an open drain mode of the host device (Vander Kamp; Col 5 Lines 39 – 40 [SCSI-I bus protocol]).

As per claims 17 and 19, Schreiber teaches combining the information from each of the at least two peripheral devices to produce combined information indicating a time which is required at the most by any of the at least two peripheral devices for its respective initialization (Col 6 Lines 37 – 40; The combined initialization time of the first and second device is used to determine when to turn on the third device); and evaluating the combined information (Col 7 Lines 52 – 58; The microprocessor evaluates the time delays in order to determine when to turn on each device).

Schreiber does not teach wherein the information indicative of a time required for an initialization of a respective one of at least two peripheral devices is transmitted from each of the at least two peripheral devices.

However, Vander Kamp teaches transmitting information indicative of a time required for an initialization of a respective one of at least two peripheral devices from each of the at least two peripheral devices (Vander Kamp; Col 8 Lines 8 – 11).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the teachings of Schreiber to receive the times from the devices because doing so allows for the manufacturer to set the time delay the device needs for initialization (Vander Kamp; Col 6 Lines 40 – 43).

As per claims 18 and 20, Schreiber also teaches sending a predetermined command to at least one of the at least two peripheral devices (Schreiber; Col 37 – 40; The command is the AC current used to power the device).

8. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 5,424,903 (hereinafter Schreiber) in view of US Patent No. 6,233,625 (hereinafter Vander Kamp) and further in view of US Patent No. 5,566,351 (hereinafter Crittenden).

As per claim 4, Schreiber in combination with Vander Kamp method as described per claim 1 (See rejection of claim 1 above).

Schreiber in combination with Vander Kamp does not teach wherein the host device evaluates the combined information for adapting a polling frequency which is to be employed for polling at least one of the at least two peripheral devices on whether the device has completed its respective initialization.

Crittenden teaches wherein the host device evaluates the information for adapting a polling frequency which is to be employed for the polling at least one peripheral device on whether the device has completed an initialization (Crittenden; Col 5 Lines 14 – 21).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the teachings of Schreiber in combination with Vander Kamp to include the adaptive polling frequency because it allows the

system to maximize data throughput by not permitting excessive sleep periods and simultaneously minimize central processing unit (CPU) load by avoiding excessive polling (Crittenden; Col 5 Lines 26 – 29).

9. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 5,424,903 (hereinafter Schreiber) in view of US Patent No. 6,233,625 (hereinafter Vander Kamp) and further in view of US Patent No. 6,964,018 (hereinafter Masui).

As per claim 6, Schreiber in combination with Vander Kamp teaches the method as described per claim 1 using SCSI devices (See rejection of claim 1 above).

Schreiber in combination with Vander Kamp does not teach wherein one of the peripheral devices is a memory card.

However, Masui teaches wherein a SCSI device could be a memory card (Masui; Col 13 Lines 41 – 44).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the teachings of Schreiber in combination with Vander Kamp to include the memory card because memory cards are an example of a storage device that can be connected to a SCSI bus (Masui; Col 13 Lines 41 – 44).

10. Claims 7 – 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 5,424,903 (hereinafter Schreiber) in view of US Patent No. 6,233,625 (hereinafter Vander Kamp) further in view of US Patent No. 6,964,018 (hereinafter

Masui) and further in view of The MultiMediaCard System Specification Version 3.31 by the MMCA Technical Committee (hereinafter MMCA).

As per claim 7, Schreiber in combination with Vander Kamp and Masui teach the use of the method of claim 1 with a memory card.

Schreiber in combination with Vander Kamp and Masui does not teach wherein the memory card is a MultiMediaCard™ (MMC) system or implements MMC functions.

However, MMCA teaches the use of a MMC as a storage device (MMCA; Page 11 Paragraph 1); the peripheral devices transmit the information to the host device upon receipt of a CMD1 command from the host device (MMCA; Page 81 Section 6.3 Power Up); the peripheral devices retrieve the information from an operating condition register (OCR) of the peripheral devices (MMCA; Page 67 Section 5.1 OCR Register); and the peripheral devices transmit the information in an R3 response to the host device (MMCA; Pages 53 – 55 Section 4.9 Responses).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the teachings of Schreiber in combination with Vander Kamp and Masui because the use of the MMC system allows for low costs data storage that covers a large area of applications (MMCA; Page 11 Paragraph 1).

11. Claims 12 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 6,233,625 (hereinafter Vander Kamp) in view of US Patent No. 6,964,018 (hereinafter Masui).

As per claim 12, Vander Kamp teaches a peripheral device connected to a SCSI bus comprising an interface configured to interact with a host device (Vander Kamp; Figure 1 Item 22); a storing component configured to store information indicative of a time required at the peripheral device for a respective initialization (Vander Kamp; Col 5 Line 59 – Col 6 Line 2); and a controlling component configured to retrieve information indicative of a time required at the peripheral device for the respective initialization from the storing component and for transmitting the information via the interface to the host device (Vander Kamp; Figure 1 Item 28). Vander Kamp teaches wherein the peripheral device is a SCSI hard drive (Vander Kamp; Col 1 Lines 31 – 42).

Vander Kamp does not teach wherein the peripheral device can also be a memory card.

However, Masui teaches wherein a SCSI device could be a memory card (Masui; Col 13 Lines 41 – 44).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the teachings of Vander Kamp to include the memory card because memory cards are an example of a storage device that can be connected to a SCSI bus (Masui; Col 13 Lines 41 – 44).

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. US Patent No. 5,701,514 – Teaches that SCSI-I mode is also known as open-drain mode (Col 1 Lines 38 – 39).

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard Franklin whose telephone number is (571) 272-0669. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fritz Fleming can be reached on (571) 272-4145. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Richard Franklin
Patent Examiner
Art Unit 2181

Fritz M. Fleming
FRITZ FLEMING
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100
7/23/2006